REMARKS

In the Office Action dated December 19, 2003, prosecution was reopened in view of Applicant's previously submitted Appeal Brief. In the present Office Action, claims 1-3, 6-9, and 11-31 were rejected under 35 U.S.C. § 103 over Wagner (U.S. Patent No. 6,532,517) in view of Kenner (U.S. Patent No. 5,956,716); and claims 4 and 5 were rejected under § 103 over Wagner in view of Kenner and Seymour (U.S. Patent No. 6,141,454).

Applicant respectfully submits that claim 1 is not obvious over the asserted combination of Wagner and Kenner. To establish a *prima facie* case of obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine reference teachings. MPEP § 2143 (8th ed., Rev. 1) at 2100-124 to 2100-125. Another requirement is that the prior art references when combined must teach or suggest *all* the claim limitations. *Id.* at 2100-125. Neither of these requirements of a *prima facie* case of obviousness has been satisfied by the present Office Action.

With respect to claim 1, the Office Action cited to the following two passages of Wagner as disclosing "receiving data to be stored in a database system having plural data servers": col. 2, ll. 31-43; and col. 6, ll. 1-8. The cited column 2 passage refers to a data storage system such as a personal computer or home entertainment device. The cited column 6 passage refers to a data gathering subsystem that "may be operatively connected to receive data from one or more of a variety of *data sources* (not shown) such as web servers, data storage mediums [sic], cable television providers, satellite broadcaster, etc." The cited column 6 passage thus does not teach that the data storage system referred to in column 2 of Wagner has plural data servers. The column 6 passage actually refers to receiving data from plural data sources, and does not teach storing data into a database system having plural data servers, as recited in claim 1. This is a first point of error made by the Office Action.

Claim 1 further recites partitioning data for storage in the database system based on a characteristic associated with the data, and storing the partitioned data in storage units associated with the plural data servers. In asserting that Wagner teaches the partitioning act of claim 1, the Office Action referred to the passage in Wagner that discusses the partitioning of a partition file into transmission packets that are transmitted over a data network. The

transmission packets are received by the data storage system of Wagner, which reconstructs the partition file from the transmission packets, strips the transmission protocol headers from the partition file, and writes the partition file to "*the*" storage disk. Wagner, 6:57-65. Although the partition file is broken up into individual packets for transmission over a network, such packets are reconstructed into a single partition file for storage on a *single* storage disk. *See also* Wagner, 7:13-22 (which indicates that a partition file is stored on storage disk 40). Thus, contrary to the assertion made by the Office Action, Wagner does not teach the recited acts of partitioning data for storage in a database system and storing the partitioned data in storage units associated with plural data servers. This is a second point of error made by the Office Action.

In view of the errors made by the Office Action in the application of Wagner to the claim, a *prima facie* case of obviousness of claim 1 over Wagner and Kenner has not been established, and the obviousness rejection should be withdrawn.

Moreover, Applicant notes that the goal to be achieved by Wagner is inconsistent with the subject matter recited in claim 1. The background section of Wagner refers to the problems associated with heavy fragmentation of data files. The background states that such fragmentation of data files causes excessive movement of the read/write arm of a disk drive, which causes noise or disk chatter. Wagner, 1:66-2:6. To address this issue, the purported invention of Wagner stores data on *a* storage medium *without fragmentation*. Wagner, 2:31-33. This is accomplished by a controller of the data storage system storing the data in contiguous storage locations on a storage medium. Wagner, 2:43-46. "By conveying the data as a part of a partition file and instructing the data storage system to create a new disk partition and store the partition file in the new disk partition, the data conveyance system ensures the data will not be fragmented when stored." Wagner, 2:66-3:3. In view of such teachings of Wagner, it is clear that Wagner does not disclose or suggest the partitioning of data for storage in the database system, and the storing of the partitioned data in storage units associated with the plural data servers act.

Therefore, even if Wagner and Kenner can be properly combined, the hypothetical combination of Wagner and Kenner fails to teach and suggest *each and every* element of claim 1, including the receiving act, the partitioning act, and the storing act.

Moreover, it is respectfully submitted that Kenner fails to teach selecting less than all plural data servers *based on the partitioning of data* to reduce a number of data servers involved in processing a database query. In Kenner, there is no partitioning of data performed. Although Kenner describes the storage of video clips in different storage and retrieval units (SRUs), there is no indication in Kenner whatsoever that any partitioning of data is being performed. As described by Kenner, when a new video clip is received, a primary index manager (PIM) 22 determines which extended or remote SRU will store the video clip. Kenner, 15:59-61. The video clip is then stored as follows: (1) the video clip is transmitted to an SRU for storage; (2) the SRU supervisory process writes the information to the disk and returns the storage location of the data to the PIM 22; and (3) the PIM 22 writes the video clip's storage address into the A/V index database on the PIM 22. Kenner, 16:4-10. Because there is no partitioning of data being performed, Kenner does not teach or suggest selecting less than all plural data servers *based on the partitioning of the data* to reduce a number of data servers involved in processing a database query.

For this additional reason, the hypothetical combination of Wagner and Kenner does not teach or suggest all elements of claim 1.

In addition, there is no motivation or suggestion to combine the teachings of Wagner and Kenner. As discussed above, Wagner is related to avoiding fragmentation of data. The goal of Wagner is to store data in contiguous storage locations. This goal of Wagner is inconsistent with the subject matte of claim 1, which recites the *partitioning* of data for storage in a database system and the *storing* of the *partitioned* data in the storage units associated with the plural data servers. To partition data across storage units of plural data servers would cause such data to be "fragmented" or broken up, which is inconsistent with the teachings of Wagner. Therefore, as Wagner teaches away from the claimed invention, there can be no motivation or suggestion to combine Wagner and Kenner in the manner proposed by the Office Action to achieve the claimed invention. *See* MPEP § 2145 at 2100-156 ("A prior art reference that 'teaches away' from the claimed invention is a significant factor to be considered in determining obviousness ... ").

A *prima facie* case of obviousness has thus not been established with respect to claim 1 for this additional reason.

With respect to independent claim 11, contrary to the assertion of the Office Action, Wagner does not disclose a database controller to partition data received through a network interface into plural groups, and to store the plural groups of data partitioned by the partitioning task into plural storage modules associated with corresponding plural data servers. The Office Action cited to column 2, lines 43-46 and column 4, lines 22-23, of Wagner as teaching the database controller storing plural groups of data partitioned by a partitioning task into plural storage modules associated with the corresponding plural data servers. The cited column 2 passage refers to storing data in a contiguous storage locations on a storage medium. The cited column 4 passage refers to a data storage system including *a storage disk 24.* Neither passage even remotely suggests a controller to store data partitioned by a partitioning task into plural storage modules associated with corresponding plural data servers.

Also, as explained above, neither Wagner nor Kenner discloses a database controller to select, in response to a database query, less than all plural data servers *based on partitioning information* to reduce a number of data servers involved in processing the database query. Therefore, even if the combination of Wagner and Kenner is proper, the hypothetical combination of Wagner and Kenner does not teach or suggest each end every element of claim 11. A *prima facie* case of obviousness has thus not been established with respect to claim 11.

Also, as discussed above, there is not motivation or suggestion to combine the teachings of Wagner and Kenner in the manner proposed by the Office Action. The *prima facie* case fails for this further reason.

Independent claim 19 is similarly allowable over the asserted combination of Wagner and Kenner.

Claims 4 and 5 were rejected as being obvious over the combination of Wagner, Kenner, and Seymour. In light of the erroneous application of Wagner and Kenner to base claim 1, the obviousness rejection of claims 4 and 5 is also defective.

In view of the foregoing, withdrawal of all obviousness rejections is respectfully requested.

All claims are in condition for allowance, which action is respectfully requested. The Commissioner is authorized to charge any additional fees, including extension of time fees, and/or credit any overpayment to Deposit Account No. 50-1673 (9261).

Respectfully submitted,

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Date

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